

MATERIAL SAFETY DATA SHEET

Section 1. Company Identification and Product Information				
Product Name or Identity: EE Broth, Mossel				
Manufacturer's Name:	Acumedia Manufacturers, Inc.	Emergency Phone No.:	517/372-9200	
	740 East Shiawassee	Fax No.:	517/372-0108	
	Lansing, Michigan 48912	e-mail:	foodsafety@neogen.com	
Date Prepared or Revised:	November 2007			

Section 2. Composition / Information on Hazardous Ingredients				
Hazardous Components: Specific Chemical Identity:	CAS-No.	%	EG-Number	Hazard Symbol
Desiccated Ox Bile	N/A	44.4%	N/A	Xi (Irritant)
Potassium Phosphate	7758-11-4	4.4%	231-834-5	Xi (Irritant)
Sodium Phosphate	7558-79-4	17.8%	231-448-7	Xi (Irritant)

Section 3. Health Hazard Identification			
Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards: (Acute and Chronic)	IRRITANT. Irritating to eyes, skin, and respiratory system. May be harmful if absorbed through the skin or ingested.		
Carcinogenicity:	IARC Monographs? No	aphs? No OSHA Regulated? No	

Signs and Symptoms of Exposure: May cause irritation to the eyes, mucous membranes, and upper respiratory tract. May be harmful if inhaled, symptoms include coughing and shortness of breath. Ingestion can cause dehydration, congestion in internal organs, vomiting, lethargy, and central nervous system effects. Skin and eye irritation can cause redness and pain.

Medical Conditions Generally Aggravated by Exposure: The toxicity of phosphates is their ability to sequester calcium. Chronic exposure of phosphates may sequester calcium and cause calcium phosphate deposits in the kidneys and induce systemic phosphorous poisoning. Persons with pre-existing skin disorders or eye problems, impaired liver, kidney, or respiratory function may be more susceptible to this material.

Section 4. First Aid Measures			
Emergency /	General Information: Immediately remove contaminated clothing. Show physician product label.		
First Aid Procedures:	Ingestion: If swallowed, wash mouth out with water provided person is conscious. Seek medical attention immediately.		
	Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention. If breathing is difficult, give oxygen. In case of unconsciousness, place patient on side position for transportation.		
Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lo eyelids occasionally. Seek medical attention.			
	Skin Contact: Remove contaminated clothing immediately. Wash with plenty of soap and water for at least 15 minutes. Seek medical attention. Wash clothing before reuse.		

Section 5. Fire and Explosion Hazard Data			
Flash Point (Method Used): Closed Cup: N/A	Flammable Limits:	LEL: (Lower Explosive Limit): N/A	
		UEL: (Upper Explosive Limit): N/A	

Extinguishing Media: Use water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions. Firefighters should wear protective equipment and self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: During heating or in case of fire, poisonous gases are produced. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.



Section 6. Accidental Release Measures

Personal Precautions: Shut off all sources of ignition, ventilate spill area. Consider need for evacuation. Wear suitable protective clothing, gloves, and eye protection. Avoid inhalation and contact with skin and eyes. Wear self-containing breathing apparatus, rubber boots, and heavy rubber gloves. Place contaminated material in a chemical waste container.

Environmental Precautions: Prevent dispersion of material. Do not allow to enter drains or water courses.

Clean-up Methods: Contact safety officer and ventilate area. Absorb spill with inert material, including dry-lime, sand, or soda ash. Place into a chemical waste container using non-sparking tools. Wash spill site after material pickup is complete.

Section 7. Handling and Storage

Handling: Ensure good ventilation / exhaustion and do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched.

Storage: Keep container tightly closed, protect from light, moist air, and steam. Store away from oxidizing agents. Keep away from heat, sparks, and open flame. Storage area should be cool, dry, and away from incompatible materials. Containers of this material may be hazardous when empty since they retain product residues.

Section 8. Exposure Controls / Personal Protection				
OES: N/A		ACGIH TLV: N/A		
Engineering Measures: Do not use compressed air by filling, discharging or handling the product. Proper ventilation, safety shower, and eye bath required. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.				
Respiratory Protection (Specify Type): For conditions of use where exposure to dust is apparent, engineering controls are not feasible, or in the event of possible spill / exposure use dusk mask to (US) N95 or type P1 (EN 143) dust masks.				
Ventilation:	Local Exhaust: 50 – 100 CFM	Special: N/A		
	Mechanical (General): N/A	Other: Safety shower and eye bath.		
Protective Gloves: Compatible chemical-resistant gloves.		Eye Protection: Safety glasses or chemical goggles to EN 166, 167, and 168.		
Other Protective Clothing or Equipment: Uniform, lab coat, or disposable lab wear.				
Work / Hygienic Practices: Follow the usual precautionary measure for handling chemicals / powder. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing.				

Section 9. Physical and Chemical Properties			
Boiling Point: N/A Specific Gravity: 2.3 g/cm ³ (Potassium Phosphate)			
	2.07 g/cm ³ (Sodium Phosphate)		
Vapor Pressure (mm Hg.): N/A	Melting Point: > 465°C (Potassium Phosphate)		
	240°C (Sodium Phosphate)		
Vapor Density (AIR = 1): 4.9 (Sodium Phosphate)	Solubility in Water: 150 g/ 100 g cold water (Potassium Phosphate)		
	Soluble (Sodium Phosphate), Soluble (Desiccated Ox Bile)		
Annearance and Odor: Solid white granules odor	less (Pot Phosphate) White granular powder, odorless (Sod Phosphate)		

Appearance and Odor: Solid white, granules, odorless (Pot Phosphate), White granular powder, odorless (Sod Phosphate)

Green or light beige solid / powder, characteristic odor (Desiccated Ox Bile)

Section 10. Stability and Reactivity					
Stability:	Unstable				
	Stable	Х	Conditions to Avoid:	Moisture, stable under normal conditions.	
Incompatibility (Materials to Avoid): Acids, alkaloids, lead acetate, antipyrine, strong oxidizing agents, and strong bases.					
Hazardous Decomposition or Byproducts: Potassium oxides, Carbon monoxide, Carbon dioxide, Nitrogen oxides,					
Sodium oxides, Sulfur oxides, and Hydrogen chloride gas. Thermal decomposition may produce toxic fumes of phosphorus					
oxides and/or phosphine.					
Hazardous	May Occ	ur			
Polymerizati	ion:				
	Will Not 0	Occur	X	Conditions to Avoid: Moisture and incompatible materials.	



Section 11. Toxicological Information

LD₅₀: ORL-RAT, .017 mg /kg (Sodium Phosphate) LD₅₀: SKN-RBT, > 4640 mg/kg (Potassium Phosphate)

Section 12. Ecological Information

Ecotoxicity Tests: N/A

Section 13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with all applicable federal, state, and local environmental regulations. If any questions arise, contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Container Information: Do not remove labels from containers.

Section 14. Transport Information

Desiccated Ox Bile, Potassium Phosphate, Sodium Phosphate:*

UN # --Class: --

Packing Group: --Hazard Class: --

IATA: Non-Hazardous for Air Transport

*These substances are not regulated for transport.

Section 15. Regulatory Information

EU Regulations, Hazard Symbol(s):

Desiccated Ox Bile: Xi (Irritant)
Potassium Phosphate: Xi (Irritant)
Sodium Chloride: Xi (Irritant)
Sodium Phosphate: Xi (Irritant)

Risk Phrases:

Desiccated Ox Bile: R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin. **Potassium Phosphate:** R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin. **Sodium Phosphate:** R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

Safety Phrases:

Desiccated Ox Bile: S 24 / 25 / 26, Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with

plenty of water and seek medical advice.

Potassium Phosphate: S 22 / 24 / 25, Avoid contact with skin and eyes. Do not breathe dust.

Sodium Phosphate: S 26 / 36, In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice. Wear suitable protective clothing.

Section 16. Other Information

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